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09/761,950	01/17/2001	Francesco Natalini	108041-0012	6194
24267	7590	09/23/2004	EXAMINER	
CESARI AND MCKENNA, LLP 88 BLACK FALCON AVENUE BOSTON, MA 02210				WEST, JEFFREY R
		ART UNIT		PAPER NUMBER
		2857		

DATE MAILED: 09/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/761,950	NATALINI ET AL.	
	Examiner	Art Unit	
	Jeffrey R. West	2857	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 16 June 2004.
 2a) This action is **FINAL**. 2b) This action is non-final.
 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 41-82 is/are pending in the application.
 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
 5) Claim(s) _____ is/are allowed.
 6) Claim(s) 41-82 is/are rejected.
 7) Claim(s) _____ is/are objected to.
 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.
 10) The drawing(s) filed on 11 August 2003 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) Notice of References Cited (PTO-892)
 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
 Paper No(s)/Mail Date _____

4) Interview Summary (PTO-413)
 Paper No(s)/Mail Date. _____

5) Notice of Informal Patent Application (PTO-152)

6) Other: _____

DETAILED ACTION***Specification***

1. The abstract of the disclosure is objected to because it is longer than the 150 word limit. Correction is required. See MPEP § 608.01(b).

Claim Objections

2. Claims 41, 45, 48, 51-53, 58, 62, 66, 69, 71-74, and 79 are objected to because of the following informalities:

In claim 41, line 5, "the operations" should be ---operations---. A similar change should be made to claim 62.

In claim 41, line 7, "the household" should be ---the given household---. A similar change should be made to claim 62.

In claim 41, lines 12-13, "messages indicating that the household appliance requires attention and" should be ---messages, indicating that the household appliance requires attention, and---. A similar change should be made to claim 62.

In claim 41, line 15, "messages sent" should be ---messages and related functional data transmitted---. A similar change should be made to claim 62.

In claim 41, line 17, "the received data" should be ---the received related functional data---. A similar change should be made to claim 62.

In claim 45, lines 5-6, "the provisions" should be ---provisions---. A similar change should be made to claim 66.

In claim 48, line 1, "includes number" should be ---includes a number---. A similar change should be made to claim 69.

In claim 52, line 1, "the delivery" should be ---delivery---. A similar change should be made to claim 73.

In claim 53, line 6, "one or more alarms" should be —one or more local alarms---. A similar change should be made to claim 74.

In claim 58, line 6, "retained messages" should be ---retained warning messages---. A similar change should be made to claim 79.

Claim 51 is objected to because of incorrect dependency. Claim 51 further limits claim 41 to determine "if a given appliance is an inefficient model based on the pattern of use" while claim 41 does not contain any support for such a "pattern of use". It is suggested that "pattern of use" be changed to --- patterns of use--- and claim 51 depend on claim 47 rather than claim 41. A similar change should be made to claim 72. For the prosecution of the application, it will be assumed that claim 51 depends on claim 47 and claim 72 depends on claim 68.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 61 and 82 are rejected under 35 U.S.C. 112, second paragraph, as

being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 61 includes a limitation "wherein the remaining monitoring subsystems are originally installed on the associated appliances during assembly". There is, however, no previous mention of any "remaining" monitoring subsystems and therefore it is unclear to one having ordinary skill in the art as to what "the remaining monitoring subsystems" refer. Further, since there is no removal of any monitoring subsystems from a larger group, it is unclear what it means to have "remaining" monitoring subsystems.

Claim 82 is rejected under 35 U.S.C. 112, second paragraph, for similar reasons.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6. Claims 41-44, 55, 56, 62-65, 76, and 77 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,553,336 to Johnson in view of U.S. Patent No. 5,963,884 to Billington et al.

Johnson discloses a system for servicing a variety of devices, such as household appliances (column 25, lines 55-56 and column 26, lines 23-28), including one or more monitoring subsystems/adapters (column 12, lines 60-63) associated with/attached to the one or more devices (column 4, lines 44-48), each monitoring subsystem continuously monitoring the operation of a given device (column 15, lines 14-16) and retaining as functional data information relating to the functioning of the device, analyzing the functional data and related historical and statistical data maintained by the monitoring subsystem and determining if the device is in need of attention (column 13, lines 50-62) to avoid a failure of the device (i.e. predict/prevent an alarm condition) (column 23, lines 13-19), and transmitting a warning/alarm message, over a network (abstract), indicating that the device requires attention, related functional data, and data aggregations/summaries to a center for receiving the messages sent by the monitoring subsystems located local to the device (column 13, line 59 to column 14, line 6 and column 14, lines 47-67). Johnson discloses that the center analyzing the respective messages and the received data and related functional, historical and statistical data maintained by the center and contacting one or more users of the associated device of the condition (column 15, lines 54-59 and column 16, lines 46-67).

Johnson also discloses that the central monitoring subsystem produces in-depth analysis of the overall data (column 15, lines 54-59) and indicates

whether the respective appliance requires more/other attention that indicated by the local subsystem (column 14, lines 3-6).

Johnson also discloses that the center alerts the user automatically (column 16, lines 52-56) or requires user input (column 18, lines 47-57 and column 19, lines 20-38).

With respect to claims 42, 43, 63, and 64, the limitations specifying that the center analyzes data from a plurality of appliances in a given household and data from a plurality of appliances in a plurality of households, are considered to be intended use. It has been held that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See *In re Casey*, 152 USPQ 235 (CCPA 1967) and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). In this case since the structure of Johnson is capable of monitoring a plurality of appliances located at a plurality of locations, it meets the claim.

As noted above, the invention of Johnson teaches many of the features of the claimed invention and while the invention of Johnson does teach indicating that an alarm condition (i.e. potential failure condition) is approaching (column 23, lines 13-20), Johnson does not specifically disclose informing the user of the particular attention required by the device to avoid

failures or distinguishing between alarm conditions requiring immediate attention and warning conditions.

Billington teaches a predictive maintenance system including a plurality of remote data acquisition nodes connected to a central control computer for performing the control and monitoring activities of a plurality of devices (column 3, lines 15-45) as well as a display for allowing the user to view monitoring results (column 3, line 65 to column 4, line 2). Billington also teaches user controlled commands for collecting, viewing, statistical trending, and analyzing obtained data (column 6, lines 43-47) in order to indicate the severity of any conditions (i.e. as a warning if attention is needed to avoid failure or an alarm if service is needed) as well as recommend specific actions for remedying the condition (column 7, lines 37-47).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson to include informing the user of the particular attention required by the device to avoid failures distinguishing between alarm conditions requiring immediate attention and warning conditions, as taught by Billington, because the combination would have provided a method for correcting the possible problem thereby preventing its occurrence and costly repair and, as suggested by Billington, by including an explicit, color-coded display the combination would have provided a clear way for a rule-based system that presents simple instruction to allow both skilled and unskilled workers to correctly maintain the device (column 7, lines 48-51 and column 11, line 63 to column 12, line 23).

7. Claims 45 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington et al. and further in view of U.S. Patent No. 5,077,582 to Kravette.

As noted above, the invention of Johnson and Billington teaches all of the features of the claimed invention except for determining, if service is required, whether the user of the appliance has a service contract that covers the service and, if so, arranges service accordingly.

Kravette teaches a photocopy monitoring system that monitors a plurality of diagnostic signals and translates the diagnostic signals to a signal usable by a remote station (column 4, lines 50-55), wherein the remote station indicates that service is required and arranges service to be performed by a maintenance specialist (column 9, lines 29-40) in accordance with a maintenance/service contract (column 4, line 66 to column 5, line 5).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington to include determining, if service is required, whether the user of the appliance has a service contract that covers the service and, if so, arranges service accordingly, as taught by Kravette, because, as suggested by Kravette, the combination would have eliminated human error by automatically arranging service while adhering to correct billing information by keeping track of service required by a contract (column 4, line 66 to column 5, line 5 and column 9, lines 29-40).

8. Claims 46, 49, 67, and 70 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington and Kravette and further in view of U.S. Patent No. 4,977,394 to Manson.

As noted above, Johnson in combination with Billington and Kravette teaches many of the features of the claimed invention including providing service in accordance with a maintenance/service contract but does not specifically teach determining whether a user can perform the service or if a service person is required.

Manson teaches a diagnostic system for an automatic appliance comprising gathering and storing data during the operation of the automatic appliance so that upon malfunction of the appliance the data can be retrieved and analyzed to determine the cause of the malfunction (column 2, lines 49-53) as well as issuing a warning to the user that the appliance is undergoing an error and needs attention (column 13, lines 40-50). Manson then teaches that upon issuance of a warning determining whether the warning indicates an error that requires action by the user of the device, and correspondingly displays what error exists so that the user may correct the problem, or determines that a call should be placed to a skilled service person for the proper maintenance (column 16, lines 26-55).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson, Billington, and Kravette to include determining whether a user can perform the service or if a service person is required, as taught by Manson, because the combination would have reduced costs by

only calling a service worker when complicated service is required and, as suggested by Mason, the combination would have provided a method for determining service requirements of an apparatus that is usually controlled by unskilled users, who would need detailed service information, rather than skilled workers who could easily correct the problem (column 2, lines 35-45).

9. Claims 58, 61, 79, and 82, as may best be understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington and further in view of U.S. Patent No. 6,236,332 to Conkright et al.

As noted above, the invention of Johnson and Billington teaches all of the features of the claimed invention except for including a polling gateway connected to the network to receive messages and determining the energy consumption of the associated appliances.

Conkright discloses a system for monitoring, controlling, and servicing a plurality of electrical apparatuses, such as lighting systems located at a plurality of households (column 1, lines 60-61), comprising one or more monitoring subsystems associated with each apparatus (column 5, line 66 to column 6, line 2) wherein each monitoring subsystem periodically determines if it needs to monitor its associated electrical apparatus (column 5, lines 42-49), and if so, obtains operating condition data, as well as energy consumption data (column 1, lines 31-41), of the electrical apparatus, analyzes the data to detect an alert condition, and, if an alert condition is determined, transmits over a wireless service gateway and corresponding

network (column 3, lines 53-54 and 61-65) an alert notification signal to a central computer (column 5, lines 50-60) and further to a customer monitoring the device through installed subscriber software (column 3, lines 25-43).

Conkright also discloses transmitting alert messages when they are received (column 5, lines 58-60) or polling, at predetermined times, the monitoring subsystems by the central computer through the gateway (column 7, lines 55-60) to determine whether or not a fault condition requiring service exists (column 8, lines 18-27), and determining if the fault indicates a complete failure or a partial failure (column 8, lines 35-49). Conkright then discloses that if it is determined that one or more of the apparatuses requires service, the state of the particular component that requires service is determined and the action needed to fix the problem is sent to a service worker who corrects the fault condition according to a service contract between the user and supplier (column 9, lines 22-29 and 64-66). Conkright then discloses notifying the user that the fault has been corrected (column 10, lines 35-40).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington to include a polling gateway connected to the network to receive messages and determining the energy consumption of the associated appliances, as taught by Conkright, because, as suggested by Conkright, the combination would have provided a method for insuring accurate two-way communication between components to avoid communication errors (column 3, lines 44-65) and determining whether the

devices being monitored are operating with high efficiency or if changes need to be made to reduce the cost/energy being used in order to save energy and money (column 1, lines 22-25).

With respect to claims 61 and 82, while the invention of Johnson, Billington, and Conkright teaches using the system and method for monitoring a plurality of different devices by using local monitoring devices (i.e. adapters), it does not specifically disclose attaching the devices during manufacturing. It has been held, however, that forming in one piece an article which has formerly been formed in two pieces and put together involves only routine skill in the art (see Howard v. Detroit Stove Works, 150 U.S. 164 (1893)). Further, it would have been obvious to one having ordinary skill in the art to form the appliance with the local monitoring device in order to avoid inadvertent disconnection of the monitoring device as well as reduced the requirements of setting up the appliance for initial use by already having the monitoring device attached.

10. Claims 47, 48, 51, 52, 57, 68, 69, 72, 73, and 78 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington and further U.S. Patent Application Publication No. 2001/0032109 to Gonyea et al.

As noted above, the invention of Johnson and Billington teaches all of the features of the claimed invention except for determining if and when an appliance should be replaced based on statistical patterns of use and

providing, according to a replacement contract, the delivering and installation of a replacement appliance that fits the pattern of use.

Gonyea teaches a system and method for predicting a maintenance schedule and costs for performing future service events of a product comprising inputting operating conditions of the product through a network to a server computer (0013) and based upon a comparison between the monitored operating environment conditions that affect the operation (021 and 0029), operating conditions, and a pattern of use model (i.e. wear and tear on a part over time based on the operating conditions), including a number of cycles (0036), over a period of time corresponding to the length of a service agreement (i.e. contract), and a predetermined limit that determines when a part should be replaced thorough service (i.e. delivered and installed) (0026 and 0027). Gonyea also teaches determining repair and replacement limits and providing new model parts that remain within the determined usage limits (0050) by searching and maintaining an inventory (0055 and 0056) according to the conditions of a maintenance contract (0058).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington to include determining if and when an appliance should be replaced based on statistical patterns of use and providing, according to a replacement contract, the delivering and installation of a replacement appliance that fits the pattern of use, as taught by Gonyea, because the combination would have provided a replacement part that would last longer by withstanding the operating conditions, thereby reducing future

costs, and, as suggested by Gonyea, provided a method that obtains maximum use of a component by using the component up to a failure limit but eliminates a potential failure by changing the part before exceeding the limit (0027).

11. Claims 50 and 71 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington et al. and further in view of U.S. Patent No. 5,924,486 to Ehlers et al.

As noted above, the invention of Johnson and Billington teaches all of the features of the claimed invention except for further analyzing the operating data to determine and indicate if the given appliance is not being used efficiently.

Ehlers teaches an environmental condition control and energy management system and method comprising receiving a variety of operating data (column 9, lines 11-17), using the data to calculate the efficiency of each monitored appliance (column 21, lines 26-32), and processing the data to indicate to the user that the appliance needs maintenance to restore the device to its desired efficiency (column 12, lines 29-45) or indicate/recommend that the user curtail usage (i.e. obtain a more efficient pattern of usage) or switch energy providers (column 23, lines 27-43).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington include analyzing the operating data to determine and indicate if the given appliance is not being used efficiently,

as taught by Ehlers, because, as suggested by Ehlers, the combination would have allowed the user to maintain the appliance operating at maximum efficiency in order to minimize energy consumption therefore minimizing the amount spent on energy (column 2, lines 33-37).

12. Claims 53 and 74 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington et al. and further in view of U.S. Patent No. 5,452,234 to Heath et al.

As noted above, the invention of Johnson and Billington teaches all of the features of the claimed invention except for setting an alarm when user attention is required and transmitting a message indicating that the appliance requires attention if the user does not attend to the appliance within a predetermined time of setting the alarm.

Heath teaches a process environment monitoring system including a local alarm indicator in the process environment and a remote alarm indicator remote from the process environment (column 2, lines 8-11) wherein the first alarm is set when user attention is required and a message is sent to set the second remote alarm if the user does not attend to the monitored device within a predetermined time (column 6, lines 51-67).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington to include setting an alarm when user attention is required and transmitting a message indicating that the appliance requires attention if the user does not attend to the appliance within a

predetermined time of setting the alarm, as taught by Heath, because, as suggested by Heath, the combination would have provided a two-tiered system allowing the user to have sufficient time to fix a small problem, without requiring the time burden or cost of calling someone remote from the device, while still providing a fail-safe system for cases when a local user is not present (column 6, lines 58-61).

13. Claims 54 and 75 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington and further in view of U.S. Patent No. 6,308,046 to Jeong.

As noted above, the invention of Johnson and Billington teaches many of the features of the claimed invention and while the combination does teach transmitting an alarm message from a local device located in a system including a plurality of appliances, the combination does not specify transmitting the alarm message through the other appliances.

Jeong teaches a video/audio alarm processing method and apparatus for base station manager in a mobile communication system including means for generating a severity-coded alarm from one device through the other of the plurality of devices (i.e. daisy-chained) (column 8, line 60 to column 9, line 7).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington to specify transmitting the alarm message through the other appliances, as taught by Jeong, because as suggested by Jeong, the combination would have reduced by burden of the

user by allowing the user to determine an alarm condition without needing to be located at the device undergoing the condition (column 8, lines 55-59).

14. Claims 59 and 80 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington et al. and further in view of U.S. Patent No. 6,498,611 to Beard et al.

As noted above, the invention of Johnson and Billington teaches all of the features of the claimed invention except for including a message header wherein at least one bit is set to one value to indicate alarm messages and set to another to indicate warning messages.

Beard teaches a system and method for providing a virtual operator panel for a peripheral device comprising a central computer in communication with a plurality of devices (column 8, lines 34-47) wherein communication is performed through messages including a header (column 10, lines 21-35 and column 13, "Printer Response" table) comprising at least one bit set to one value to indicate alarm messages, indicating that proper operation cannot be performed, and set to another to indicate warning messages (column 11, lines 9-24).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington to include a message header wherein at least one bit is set to one value to indicate alarm messages and set to another to indicate warning messages, as taught by Beard, because, as suggested by Beard, the combination would have provided a method for

quickly indicating and determining the type of message, thereby reducing diagnostic time and burden by the host computer/monitoring device (column 11, lines 3-9).

15. Claims 60 and 81 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson in view of Billington et al. and further in view of U.S. Patent Application Publication No. 2002/0042830 to Bose et al.

As noted above, the invention of Johnson and Billington teaches all of the features of the claimed invention except for associating flags with the messages, checking the flags to determine if a message has already been sent and, if not, sending the message.

Bose teaches a system, method, and applications for real-time messaging over http-based protocols comprising sending information between a plurality of components (0067) using messages that include identifiers (i.e. flags) that indicate whether the message as been sent and if it is determined that it has not been sent, sending the message (0080).

It would have been obvious to one having ordinary skill in the art to modify the invention of Johnson and Billington to include associating flags with the messages, checking the flags to determine if a message has already been sent and, if not, sending the message, as taught by Bose, because, as suggested by Bose, the combination would have prevented a device from incorrectly performing the same operation twice by insuring that a particular message is only sent once (0080).

Response to Arguments

16. Applicant's arguments with respect to claims 41-82 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

JP Patent Application Publication No. 10-327154 to Osada et al. teaches a network monitoring system including a daisy-chain alarm system.

18. If a copy of a provisional application listed on the bottom portion of the accompanying Notice of References Cited (PTO-892) form is not included with this Office action and the PTO-892 has been annotated to indicate that the copy was not readily available, it is because the copy could not be readily obtained when the Office action was mailed. Should applicant desire a copy of such a provisional application, applicant should promptly request the copy from the Office of Public Records (OPR) in accordance with 37 CFR 1.14(a)(1)(iv), paying the required fee under 37 CFR 1.19(b)(1). If a copy is ordered from OPR, the shortened statutory period for reply to this Office action will not be reset under MPEP § 710.06 unless applicant can demonstrate a substantial delay by the Office in fulfilling the order for the copy of the provisional application. Where the applicant has been notified on the

PTO-892 that a copy of the provisional application is not readily available, the provision of MPEP § 707.05(a) that a copy of the cited reference will be automatically furnished without charge does not apply.

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey R. West whose telephone number is (703)308-1309. The examiner can normally be reached on Monday through Friday, 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc S. Hoff can be reached on (703)308-1677. The fax phone numbers for the organization where this application or proceeding is assigned are (703)308-7382 for regular communications and (703)308-7382 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.

jrw
September 17, 2004


MARC S. HOFF
SUPPLEMENTARY PATENT EXAMINER
TECHNOLOGY CENTER 2800